BOSTON MEDICAL AND SURGICAL JOURNAL.

Vol. XXXIII. Wednesday, December 24, 1845. No. 21.

REMARKABLE CASE OF ILLUSIVE VISION.

To the Editor of the Boston Medical and Surgical Journal.

Dear Sir,—The contents of this communication I hope will be sufficiently interesting to serve as an apology for my intruding on one with whom I have had no personal acquaintance, knowing, as I do, the interest you have always taken in the promotion of science.

The case is a rare one, and, as far as I know, the most remarkable instance of the kind ever experienced by any person. I was bred a physician in the years 1802, 3 and 4, and at a period when *animal magnetism* and *phrenological bumps* were not consulted as the arbiters of the destinies of men. I pursued that course of life to which my inclination and fancy led, and many times no doubt at the expense of my interest and better judgment. But I believe that I sustained a fair reputation as a physician, and as a man of science and good morals. I had a feeble constitution, slow pulse, and was of a scrofulous habit. Nothing remarkable had occurred to me until 1838, in the 59th year of my age, when I found the sight of my right eye began to fail—first, by a *smoky appearance, black specks* dancing before it, revolving motion of objects, &c. On entering my sleeping room without a light, it would sometimes appear light as day, and beautifully papered, though different from the real; and in attempting to place my hand upon the wall, it was not there.

Although there was no morbid appearance, the sight soon became so distorted as to cross the axis of vision of my left eye, which soon began likewise to fail, so that in 1842 I was totally blind, without ever suffering any pain or inflammation. In this situation I often dreamed of having my sight restored, and of seeing the most beautiful landscapes. At length these landscapes began to appear in miniature *when awake;* small fields, a few feet square, would appear, clothed with the green grass, and other vegetables, some in bloom. They would continue two or three minutes, and then disappear. I saw them most frequently on first retiring to bed.

During the fall of 1843, as I was sitting by the stove in the evening, I saw a lady sitting by me with an infant child in her arms asleep. In two or three minutes she disappeared. Near the same time I saw a small child standing by me and looking me in the face. The appearance was so familiar that I inadvertently put out my hand, although I knew it to be an illusion, for there was no child in the room. About the 25th of

January, 1844, while in my usual health, I began to discover objects by an internal sight. The apartment was partially illuminated, and I saw different kinds of animals, this appearance continuing for several days and nights. I next began to see a *grey* horse which was constantly standing by me, with a bridle on, champing his bits and tossing up his head as if checked too short. This appearance was constant every day for three weeks.

About the 20th of February I began to see human beings, sometimes in great numbers, of both sexes, and likewise all the different kinds of animals and fowls that I ever saw by the natural sight. The darkest nights were no obstacle to my seeing these creatures, for my room was always sufficiently light to discern every feature of their faces. They would often come to my bed-side, stoop down over me, and look directly into my eyes; and however trying my situation, there was no way for me to avoid it, for to close my eyes or cover my head was of no avail. This state of illusion continued until the 3d of April, a period of ten weeks, during which time I saw more people and animals than I ever saw before, during the same period, in my life, with my natural sight. Besides animated beings, I was shown all the works of art, and a great variety of vegetables, &c. During the whole time of these illusions, I could see through the partition of my apartment, sometimes by two or three openings, into clear day-light; and the surface of the ground would be clothed with green grass. These openings would often increase in size and number, so as to appear as if the whole partition would pass away and leave me in the open day.

On the evening of the 23d of March, after a severe trial with much of my company during that day and evening, I was threatened to be run over about 10 o'clock by a drove of oxen; but having my presence of mind, I sat quiet, and with much crowding they all passed without touching me. In a few minutes after, the partition before me passed away, and I was left the remainder of the night without a covering from the rays of the sun. My prospect, however, was limited, for I was not permitted to see over more than what I judged to be fifteen or twenty acres, situated on a hill-side descending to the south. It was handsomely walled in, and divided into four lots. Near me stood a large *stone barn.* I also saw some cattle grazing in the field, and one large ox came down near me, and went into the barn. I passed the night without a moment's sleep, and arose in the morning very much exhausted, and my eyes feeling so weak that I was not able to open them. The same appearance returned again a few evenings after, but lasted only about three minutes, during which time I saw an old man with a basket upon his arm coming towards me, but he soon turned into a yard and disappeared. Whenever I attempted to extend my observations further, I always lost sight of the whole.

Among the many peculiarities observable in these illusions, I would mention, that for the first ten weeks I saw no human beings, except their head and face, down to their shoulders; the other parts of the body being hid in obscurity. The first time I saw entire forms, was one morning when I awoke, and turned my face towards the foreside of the bed; I saw hundreds of men, women and some children, taking their places in four columns, beginning at the head of the bed, and extending to the west until lost in the distance. They all faced one way, and appeared to be listening to a speaker, though I could not see any. The women were variously dressed, in caps and bonnets or hoods. The men were bareheaded. In fifteen or twenty minutes they broke up and disappeared. I was passing through a back room one evening, and I saw, through an open door, a small room illuminated, but where I knew there was none. I saw a woman standing in the centre of the room, warmly clad, with a frock and hood. Her face was turned partly from me, but she soon turned her face towards me, and sat down in an arm chair. I could not recognize her countenance. In about three minutes the light was extinguished and she disappeared.

After the 3d of April, I saw little or nothing worth noticing (after seeing so much), although scarcely a day passed without my seeing some one or more human faces, until the 18th of June, when various animals were seen about me, and the grey horse which I had formerly seen, with his head still bridled. At this time I rode out a short distance, to visit my daughter, hoping that a change of place and company would give a check to these appearances. But in this I was disappointed. The first night on retiring to bed, I was again much troubled with my silent, but impudent visiters, which prevented my sleeping until a late hour. The second night they were still more intruding, often three or four in number approaching my bed and looking me in the face. The night was stormy and dark: but wherever these human forms appeared, it was always sufficiently light to enable me to see them distinctly. After a short sleep I awoke about 2 o'clock, when my room appeared as light as noonday, and was filled with men and women. They sat upon every side of my bed, and from fifteen to twenty standing up. They often turned towards me, and then towards each other and laughed. As soon as the family were up in the morning, I left my bed, "having to displace two or three of them to make room to dress myself." I returned home the next day, and from that time until the 4th of July, was one continued scene of novelty and wonder, of which I am not able to describe the tenth part. Besides multitudes of people by night and day, I saw horses and carriages in great numbers. At one time a gentleman drove up near me with a span of grey horses and buggy; he stepped down and helped two ladies into the carriage, and drove off on a smart trot to the south. I kept my eye on them until they had time to drive about half a mile, and they then disappeared in the gloom which has always limited my vision. At another time, one evening, a stage coach came in from the southwest; as it passed a little by me, it met with a number of carriages standing before a public house. It stopped and waited until the owners could clear the road; some started forward, others reined back their horses, and in about three minutes the way was cleared, and in the mean time the stage-driver dismounted, adjusted the harness, returned to his box and drove on.

The morning of the 8th of February, 1845, I awoke about 2 o'clock, and beheld the room illuminated and filled with people of both sexes. They often nodded me in turn, and sometimes they would come to me and look as if they knew me; but believing they were from an evil source, I generally returned a stern and repulsive look, upon which their countenances would change, and they would soon withdraw or disappear. I could see men about their fields and barns, as if at work, in their shirt sleeves. During the whole of that day I saw a multitude pass by me on the left, apparently with reluctance, to a dark building or shed where they disappeared. The following night, at the same hour, I awoke and beheld an extensive plain, with a gentle declivity towards the south—the surface perfectly smooth and handsome. I seemed placed on the southern border, from which I could see a whole regiment of soldiers coming from the north. As they approached, their number increased to thousands. Their dress was so splendid as to dazzle my sight. Their movements were generally quick, often halting and forming in two columns, facing each other, and extending in line as far as the eye could reach. They would then break up and march in different directions, often driving each other in large companies. I felt peculiarly gratified in seeing large groups of little boys running and jumping before and after the troops—many of them dressed in a light blue frock with a scarlet sash. These movements continued through the day until near sunset, when the field was cleared until after 10 o'clock, when I saw them returning, but they took a western movement and soon disappeared.

During the following week I always awoke at the usual time, and beheld new scenes of wonder which I had never before witnessed—such as a city lighted up, huge brick buildings enclosing me on every side, and in a crumbling condition, with dark caverns or arches under them, where I could descry human beings moving about. Sometimes I saw stores of merchants' goods, with their clerks behind the counters, but no customers. In the streets I could see men on horseback, loaded teams, dogs, fowls of all kinds, and mechanical work of every description.

On the night of the 13th, the muster field, before mentioned, was occupied by men on horseback riding towards the west. The number was innumerable. They continued to pass for several hours, in a column at least half a mile wide. The same appearance returned on the 15th. The evening of the 14th, after retiring, I had a most interesting view of a city which enclosed me on every side. The buildings consisted of new frames several stories high, but without any covering. I could count an hundred men on a single frame, pulling on the timbers for the roof. Sometimes a street would be opened as far as the eye could reach, composed of nothing but wooden frames.

Among all the peculiarities of these illusions, was that of a revolving wheel, which seemed to perform the office of a train of cars. The wheel was situated in the interior of a building. I could see only one edge of the wheel, which appeared through a small window. The engineer always stood on the outside of the wheel, and when his face come even with the window, the wheel would stop, and he would step off, while the passengers, from one to five or six, would step out from the inside of the wheel, each one taking his baggage, and walk off in different directions. This operation was repeated three or four times a minute, for three days, and in the mean time there would be twenty or thirty standing around, waiting their time.

Among the great variety of moving objects which I have seen, their motion has been from right to left, with very few exceptions, as that of the marches and counter-marches of the soldiers. It was common to see two objects moving in the same direction, while one would move much faster than the other and pass by. Another peculiar trait of these motions was, that some corresponded to the motion of the eyeball, while others were stationary, at the same time.

What I have here stated must appear incredible to those unacquainted with the history of illusive visions. Yet it is not only strictly true, but is only a mere sketch of what I saw during fifteen weeks; neither have I language to describe many of the most interesting particulars. How far my blindness contributed to produce such a result, I am not able to say.

Never before have I been able to realize the ancient comparison of the human mind to a microcosm, or universe in miniature. That such a display of military tactics as that seen on the 9th of February, should be kept up with the greatest activity for twenty hours, and which no other person in the world could see, all on my account, is to me truly astonishing. But a little reflection convinced me that the whole was confined within the organ of mental vision, and occupied, perhaps, a space of less than the tenth part of an inch square.

I have had no other motive in making a record of my experience than a hope that at some future day it might contribute something to the advancement of that occult, mysterious branch of science, called mental philosophy; and I shall receive your remarks and advice with much pleasure, if my case is worthy of them. Yours with respect.

Lempster, N. H., Dec. 7, 1845. TRUMAN ABELL.

N. B.—The above communication was copied, at his request, from a letter of his own hand writing. T. W. ABELL.

NATURE OF VACCINA.

By S. A. Cook, M.D., Buskirk's Bridge, N. Y.

[Communicated for the Boston Medical and Surgical Journal.]

THERE are many diseases which, though very different in many of their characteristics, agree in several important points; among which is the fact that when once passed through, they render the system, as a general rule, for life incapable of a second attack.

Diseases associated together by this single character, though very different in their operation, and in their destructive tendencies as wide apart as the poles, yet, says Dr. Holland, "are still so closely associated, that it is impossible to view them asunder. Such is the perfectly definite course of their symptoms, in the ordinary form; the frequency of an external or eruptive stage in each; and the well-marked power of conveying infection by the re-production or diffusion of the virus respectively peculiar to them," all of which, while they possess many characteristics in common with other diseases, serve to set them distinctly and forever apart from them.

Again, when we consider the minuteness of the speck of virus capable of producing so great a commotion in some cases, and in others by an almost unnoticed process producing a change as permanent as life, we might be astonished at the apparent disproportion between cause and effect. Yet when we reflect that the process with regard to the virus is nothing more nor less than a species of generation, and that like the *ova* of many of the insect tribes, the virus is deposited in a nidus adapted to hasten or aid its incubation; it would not be inconsistent with analogy that the same bed would answer the purpose but once. Not intending, however, to enter the fields of conjecture in a paper like the present, I shall not venture to pursue this train of reasoning farther, fully coinciding with Dr. Holland, when examining this subject, that while looking at the general form of this class of diseases, "we seem ever on the verge of some discovery giving new inlet to the more mysterious parts of the animal economy. Such discovery, indeed, if hereafter made, is not unlikely to be derived from methods of inquiry in which these relations are directly involved."

Pathological science is not yet sufficiently well understood to determine in what these changes consist, or even upon what tissue or material of the system they are effected. What change of structure or action gives to them definiteness of course or symptoms? By what peculiar process, vital or chemical, or both, is a virus concocted which maintains its own specific characters through unnumbered generations? What change affords prophylaction? These questions are yet among the innumerable unanswered ones in the womb of time, for future investigators to answer. But though we cannot explain all the mysteries of prophylaction, much less tell how a disease so mild as vaccina can protect the human system against the assaults of one so violent as variola; yet, by a careful examination of facts noted by observers in various countries, we may learn the extent of the protection and the laws that govern its operation; may give to man the inestimable blessing of escaping this plague of plagues, though unable to satisfy his curiosity with regard to its *modus operandi.*

Vaccina can only be communicated from one individual to another by inoculation. When the virus has been properly inserted, no disturbance, either general or local, is observable, if we except that arising from the slight mechanical injury of inoculation, till from a day and a half to three or four days after, when "a small red point may be perceived to mark the spot of insertion, which being pressed gently and the fingers at the same time drawn carefully over it, will yield sensation like that from a very small hard body situated beneath the surface of the skin. The redness likewise will be perceived to vanish during the pressure, but to return upon its removal. This is the first evidence of the action of vaccina.

"The inflamed point now slowly and gradually enlarges. Towards the fifth day it takes on that peculiar action of secretion which is one of the most beautiful features of the affection. A particle of clear and transparent virus may be perceived to have been formed during the course of the day, and to be deposited at the very extreme circumference of the yet incipient vesicle; the cuticle, round the centre, begins to be raised and separated from the structure beneath, under which watery lymph is deposited."

To this period we can discover no constitutional impression; and if the vesicle should now be completely removed, the impressibility to smallpox would in no wise be eradicated, or perhaps even modified. The magazine is now formed from which the constitution is to draw its necessary supply until saturated. "The lymph continues to increase, filling the extreme edges of the vesicle, while the centre remains unaltered, and in its natural state. As the affection progresses, the secretion of the virus continues, and the surrounding edges become more full and more prominently elevated above the centre." By the eighth day, as a general rule, the vesicle reaches its *maximum*, though in this respect there is a considerable variation in different individuals, and also a perceptible difference in different seasons: "its circular margin becomes elevated, and its centre proportionally depressed."

At this time, if punctured with a lancet, a transparent fluid exudes, which is the genuine humanized vaccine virus; perfect in quality for use, which is probably the latest day that so much can be said. Virus may be obtained at a later period, that will frequently answer the designed purpose, yet it is mixed and diluted with other than specific matter. The constitution, if no contingences interpose, soon becomes saturated, and the impressibility to variola is destroyed. Absorption into the system, and the exhaustion of susceptibility to variola, are usually completed by the tenth day, and between the eighth and tenth is the usual time for the manifestation of the constitutional symptoms, consisting of a slight general indisposition, presenting the ordinary phenomena of mild febrile commotion.

All these manifestations exhibit the specific character of the disease; but when the susceptibility to variola is destroyed, that of vaccina is also, and the remaining virus in the vesicle having lost its specific power, local and general, possesses only that of a simple irritant or extraneous substance, and through this property another action is produced around the vesicle, which is nothing more than a simple inflammation, modified, as all simple inflammations are, by its cause, and the state of the system; terminating in suppuration, depositing a layer of pus under the vesicle, and thus cutting short the farther unnecessary absorption of the vaccine lymph. The vesicle being now insulated, concretes into a semi-crystalline scab, resting on a layer of opaque purulent matter; all of which usually fall off about the twenty-first day.

Such is the order in which the phenomena of this invaluable disease are developed, beautifully illustrating the truth, that pathological changes exhibit the same regularity and harmony in their progress, as we see in the performance of the healthy functions. And as in the latter contingences may derange or entirely prevent their completion; so in vaccina their occurrence may so disturb the harmony of its progressive development, as to render its operation incomplete and nugatory.

Thus Dr. Hayward relates, that in 1816 he vaccinated a female infant; a perfect vesicle was formed, from which he took matter on the eighth day, that gave the disease to others. On the ninth, in consequence of the exposure of the limb to a strong current of air while the child was asleep, a violent inflammation took place round the vesicle, and a great discharge of pus followed. During the year 1827, entertaining some doubt whether the system was protected against smallpox, he vaccinated her again, and no one ever had the disease more perfectly than she did. "This induced me to believe," remarks Dr. Hayward, "that the inflammation and suppuration around the vesicle prevent the absorption of the vaccine virus into the system, and that the disease, until this takes place, is entirely local."

This opinion of Dr. Hayward is undoubtedly founded in truth. As the process by which nature terminates the absorption of virus is by inflammation and suppuration, it follows that whatever contingency excites this state too early, cuts short the supply of virus before the constitution is saturated and the individual protected. Yet would Dr. Hayward's case have afforded much more satisfactory evidence of the principle deduced, had the re-vaccination been performed soon after the failure or destruction of the vesicle.

Another circumstance that should be noticed in Dr. Hayward's case, is the wounding of the vesicle for the purpose of obtaining virus—a proceeding, when only a single vesicle is produced, entirely unjustifiable, and one which was more probably the cause of the ensuing inflammation of the vesicle than the current of air that so inopportunely touched the arm on the ninth day. Where but a single vesicle arises it should be watched with more than ordinary care, that no injury befal it; and if by accident it get inflamed so early as to render doubtful the complete saturation of the system, I have usually adopted the plan recommended by Mr. Bryce, of Edinburgh, to immediately re-vaccinate while the constitution may yet be under the partial influence of the matter from the first vesicle.

DEATH OF DR. DOUGLASS HOUGHTON, STATE GEOLOGIST OF MICHIGAN.

To the Editor of the Boston Medical and Surgical Journal.

Dear Sir,—Science and humanity have much to deplore in the death of the lamented Dr. Douglass Houghton, State Geologist of Michigan, who was drowned near Eagle River, Lake Superior, on the evening of the 13th October last. Dr. Houghton was one of the most learned and distinguished physicians at the West. Much of his time in the latter part of his life was devoted to the pursuit of science, and particularly to the science of Geology and Mineralogy. Some extended reports of his have been laid before the State Legislature of Michigan, and have been published, which do great credit to his indefatigable researches in this interesting department of knowledge. It was, I believe, in the prosecution of his discoveries and researches in the region of the copper mines, near Copper Harbor, on Lake Superior, that he met his untimely fate in the midst of high health, great usefulness, and at the period of middle age. Not long before he was drowned he was appointed Professor of Geology, Mineralogy and Chemistry in the Michigan University at Ann Arbor. He was formerly a distinguished pupil of the late Professor Eaton, of the Scientific Institute at Troy. I send you an account of the public meeting at Detroit, in consequence of the death of Dr. Houghton, with the resolutions, which give an exposition of the estimation in which he was held by the citizens of Detroit, and the inhabitants of Michigan. I think they will be read with interest by our professional brethren in the various parts of the Union, where your wide-spread Journal is circulated.

Most truly yours,

Deerfield, Mass., Dec. 11, 1845. STEPHEN W. WILLIAMS.

Dr. Zina Pitcher offered the following preamble and resolutions.

Whereas, We have learnt that Dr. Douglass Houghton, Geologist of this State, was drowned near the mouth of Eagle River, on Lake Superior, on the night of the 13th inst.:

Resolved, That this community have heard with deep regret of this melancholy catastrophe, which has deprived us of one who has been for many years a most useful and estimable citizen.

Resolved, That as citizens of Detroit we have lost in Dr. Houghton one who has been zealously and closely identified with our best interests. In public and in private his efforts have been ceaseless to promote our welfare. When that dreadful scourge the cholera was abroad among us, his unremitting labors and kindness contributed much to mitigate and stay its ravages. And when called to preside over our Councils as Mayor of the city, he manifested the same solicitude for the public good, and by his independence and energy obtained the respect of all parties and all men.

Resolved, That this State has been deprived of one of her brightest ornaments, and one who has done much to increase her reputation and her welfare. Chosen at an early period State Geologist, and Professor of Geology, Chemistry and Mineralogy, in the University of Michigan, he began and has continued his labors with untiring devotion, to collect such knowledge as would best enable him to benefit the State and the cause of education. For this he has sacrificed his time, his money, and his health, and more than once perilled his life. Disregarding every hardship and sacrifice, he has persevered and accomplished enough to gain for himself and for us a distinguished reputation among the patrons and followers of knowledge. And by his skilful efforts to develope the rich resources of our soil, he has advanced us far on the way to prosperity and distinction. The work which he has done is one of our best passports to honor and respect, at home and abroad.

Resolved, That science in his death mourns for the loss of one of her noblest sons. Without guide or teacher he devoted himself to its study in his early youth, and from that time onward has never wearied in its researches. And by his quiet and unobtrusive modesty he has exalted its character as much as by his thorough and extensive acquirements. It never had a more unassuming or a more worthy votary. The distinguished societies of this country and of Europe have enrolled him among their numbers, and whenever he has appeared among them, he has been listened to with attention and respect. He occupied one of those high places in which it will be hard to find a worthy successor.

Resolved, That we remember with gratitude and respect his character as a *man*. Open-handed and generous, and affable alike to all, the rich and the poor have lost in him a benefactor and a friend. And he has left behind him a noble example of persevering constancy. A self-made man, he has not for a moment relaxed in his industry, or suffered any tempation to divert him from his lofty aim. Both when standing almost alone and unaided, and when his perseverance and devotion had multiplied his friends and increased his prosperity, he still remained the same steadfast, laborious student, the same honest, independent and generous man. And few have departed so young as him, who have left in any community so many attached friends of every age and class, or so bright and decided a character to revere and imitate.

Resolved, That we tender to the bereaved family of the deceased, our earnest and heartfelt sympathy.

DR. NORTH—THE TREATMENT OF CHRONIC DISEASES.

[Communicated for the Boston Medical and Surgical Journal.]

Though a constant reader of the Boston Medical and Surgical Journal, yet, by some oversight, I did not notice, till a day or two since, an article "On the Treatment of Chronic Diseases," by Dr. North, of Saratoga Springs, though it was published in the weekly number of April 23d. I refer to this paper because it harmonizes so perfectly with my own long-cherished views on this subject.

It seems to me the medical profession have lost very much in not giving that prompt and constant attention to chronic diseases which Dr. N. recommends. I know it is very difficult for a practitioner in medicine, who attends to all branches of the healing art, and who is called from one case of acute and dangerous disease to another, day by day, to recollect the case of the chronic invalid, and more especially the *symptoms* of his disease, when he sees him but once a week. But the fact that he does not remember all these, though his avocations are such that it is impossible for him to do it, has unquestionably been the occasion (though on the part of the practitioner the innocent occasion) of his patient's falling into the hands of some one of the numerous charlatans of the day. Would it not be a great improvement in reference to such patients, if the physician would uniformly give them to understand, at the first call, that chronic diseases cannot be speedily eradicated—that when they have once invaded the system, the process of cure must be slow and protracted, and restoration to health very gradual—that he shall by no means be neglected—and that, if he depends on you for his physician, he shall be visited as often as the nature of his case demands. If a practitioner does not choose to engage one of these protracted cases, he had better give his patient such notice at his first visit; but if he does so engage, let him do it with a distinct understanding of the full amount of the time, remedies and attendance, which will be necessary to restore health to the long-diseased body, and let his efforts to accomplish that work of healing not be relaxed till it is done.

The nature of such diseases, and the tendency which there naturally is in a *general* practice to neglect, or *seem* to neglect them, has often caused me to think that it would be much better for such patients, and for patients generally, and far more for the honor of the medical profession, if more of them confined their practice to the treatment of one specific disease, or one *class* of diseases. This is the case, to a far greater extent, in Europe and England than in America; though here, we have the medical practitioner and the surgeon, the oculist, dentist, &c. Let us have those who confine all their attention to one class of diseases, as our professors in medical colleges lecture upon *one* branch of medical science, and it seems to me it will be a decided improvement in medical routine.

The importance of Dr. N.'s plan of "a manuscript blank volume, for a case book; in which each case and prescription should be carefully noted," is of vast moment. It is by no means a new suggestion, but, nevertheless, it ought to be repeated until it shall be universally adopted. There are many reasons for its use. It serves not only to recall the symptoms of that particular case, with the prescription given at the time, which, the doctor remarks, are so often forgotten; but it may be of great utility as a reference in other cases of a like character when reviewed at leisure. No physician can always call up, at any one moment, all the best remedies for an individual case; but, if he keep a memorandum of his cases with the prescriptions, and carefully note down the effect of the remedies, he will find it an invaluable assistant for future practice. We know a physician who has pursued this course for many years, and, he thinks, with great benefit.

ABSCESS AND SLOUGHING OF THE EXTERNAL CAROTID.

To the Editor of the Boston Medical and Surgical Journal.

SIR,—My attention has just been called to the prize essay of the Connecticut Medical Society, by Dr. P. W. Ellsworth, which you have recently published in your Journal. It was with no little surprise that I met with allusions to my name in that essay, and the more so as I found that in both instances where my name was used, the Dr. had fallen into error. I allude to the case of abscess and sloughing of the external carotid.

The account of the case is correct so far as relates to the hemorrhage and its suppression. But in the farther relation of the case I am represented as committing (what I would consider in any one else) a most unpardonable error, that is, removing "the plugs for some reason or other next day." On referring to my notes of the case, I find that the dressings were removed on the *fifth* day, which even then was earlier than I wished, but the weather was very warm (August), and the wound had become exceedingly offensive, which induced me to dress it thus early. On removing the "plugs" I found the ulcer assuming a very healthy appearance, granulating kindly, and the external carotid artery entirely separated, and the loose end completely isolated for one third of an inch; and instead of being with "open calibre," as represented in the essay, it was perfectly closed, and the pulsation in it could be as distinctly seen as that of an artery with a ligature upon it after amputation. There was no pulsation that could be perceived in the temporal or facial arteries on that side for several months, but it was finally perceived, though indistinctly at first, and it is still quite feeble.

In the other case I am represented as using "tinct. myrrh with carb. potass." It was carb. *ammonia* that I used, which may not be as useful as the potass., yet I prefer to have it correctly stated.

I have no doubt that Dr. E. intended to state the case correctly, and do not wish to find fault with him. Still I would like to have the corrections made in your Journal, if you can allow it. L. WOODRUFF.

New Britain, Conn., Dec. 9th, 1845.

ORIGIN AND PROGRESS OF STORMS IN THE UNITED STATES.

[FROM the Report of the Surgeon-General of the United States Army to the Secretary of War, dated Nov. 1, 1845, we copy the following letter from Mr. Espy, the meteorologist, to Dr. Lawson. Mr. Espy, as well as the Surgeon-General, deserves great praise for his meteorological investigations, and it is gratifying to perceive that their researches are likely to be crowned with success.]

SIR,—With the aid of Lieut. Irons, I have since my last "report" completed ninety-two meteorological charts, for the months of January, February and March, 1844. These are the months corresponding to those of my first report for 1843.

In that report I ventured to draw from the documents then collated the following twenty generalizations:

1st.—The rain and snow storms, and even the moderate rains and snows, travel from the west towards the east, in the United States, during the months of January, February and March, which are the only months yet investigated.

2d.—The storms are accompanied with a depression of the barometer near the central line of the storm.

3d.—This central line of minimum pressure is generally of great length from north to south, and moves sideforemost towards the east.

4th.—This line is sometimes nearly straight, but generally curved, and most frequently with its convex side towards the east.

5th.—The velocity of this line is such, that it travels from the Missisippi to the Connecticut river in about twenty-four hours; and from the Connecticut to St. John's, Newfoundland, in nearly the same time, or about thirty-six miles an hour.

6th.—When the barometer falls suddenly in the western part of New England, it rises at the same time in the valley of the Mississippi, and also at St. John's, Newfoundland.

7th.—In great storms, the wind, for several hundred miles on both sides of the line of minimum pressure, blows towards that line, directly or obliquely.

8th.—The force of the wind is in proportion to the suddenness and greatness of the barometric depression.

9th.—In all great and sudden depressions of the barometer, there is much rain or snow; and in all sudden great rains or snows, there is a great fluctuation of the barometer.

10th.—Many storms are of great and unknown length from the north to the south, reaching beyond our observers on the Gulf of Mexico and on the northern lakes, while their east and west diameter is comparatively small. The storms, therefore, move sideforemost.

11th.—Most storms commence in the "far west," beyond our most western observers; but some commence in the United States.

12th.—When a storm commences in the United States, the line of minimum pressure does not come from the "far west," but commences with the storm and travels with it towards the east.

13th.—There is generally a lull of wind at the line of minimum pressure, and sometimes a calm.

14th.—When the wind changes to the west, the barometer generally begins to rise.

15th.—There is generally but little wind near the line of maximum pressure, and on each side of that line the winds are irregular, but tend outwards from that line.

16th.—The fluctuations of the barometer are generally greater in the northern than in the southern parts of the United States.

17th.—The fluctuations of the barometer are generally greater in the eastern than in the western parts of the United States.

18th.—In the northern parts of the United States the wind, in great storms, generally sets in from the north of east, and terminates from the north of west.

19th.—In the southern parts of the United States, the wind generally sets in from the south of east, and terminates from the south of west.

20th.—During the passage of storms, the wind generally changes from the eastward to the westward by the south, especially in the southern parts of the United States.

The great uniformity of the phenomena accompanying the storms of the first three months of the year 1843, emboldened me to draw the above generalizations; observing, at the same time, "how far these generalizations will apply to other months of the same year, or to the same months of different years, remains to be seen by future investigations."

I have the pleasure now to state, that the phenomena exhibited in the charts herewith communicated so entirely correspond with the above generalizations, that there seems to be no necessity to make any change in them. It is therefore expected that future observations will establish them as *laws*, applying to *these*, and perhaps to the other winter months.

In the summer months, however, there is one great feature of the storms of the winter months wanting; that is, their great size. In the summer the rains are quite local; and though, like the winter storms, each rain appears to progress towards the east from the place of beginning, yet, from want of size and continuity over a great space, they are not so easily traced.

I shall, therefore, not attempt to deduce any generalizations for the summer storms, until all the journals which may be received for several years shall have been collated.

In conclusion, I will venture to deduce two other generalizations, as applicable to the storms of January, February and March.

21st.—The northern end of the line of barometric minimum generally moves faster toward the east than the southern end.

22d.—The maxima and minima of the thermometer move towards the east with the storms.

All which is respectfully submitted. James P. Espy.

THE RELATIONS AND NATURE OF WATER.

[The Introductory Lecture to the course of Chemistry, by Professor Draper, of the University of New York, is one of the best and most beautifully written of his published papers. We should be glad to copy the whole lecture, but can at present find room for only the following.]

We talk about the uses of water, and imagine that nature furnishes us a perennial supply. The common philosophy of people is doubtless advanced so far as to admit that in some unknown manner this substance is created in the clouds, descends as rain for the uses of animals and plants; but whence it came, or where it goes, never enters into their consideration. Men constantly forget that in this world nothing is ever annihilated; an atom, once created, can by no process be destroyed. The liquid that we drink to-day has been drank a thousand times before; the clouds that obscure the sky have obscured it again and again; and if the sorrows of mankind are as many as the philanthropist may well fear, he might suspect a great part of the ocean is perhaps made up of tears that have fallen from the human family. In the air their sighs die away, and in the ocean their tears are all lost. This using over and over again is a striking characteristic of the ways of nature; the beautiful and the vile—the great and the small—are all mingled together; the tears that you shed in the depths of grief to-day, may be squirted to-morrow through a hose-pipe to clear the dirt off the streets; or whistled away through the squeak of a loco-motive, to scare some dilatory cow off the track. So much for the sorrows of man.

What then becomes of the immense quantities of water, which, thus entering as a constituent of the bodies of animals, gives to their various parts that flexibility which enables them to execute movements, or combining with vegetable structures, fits them for carrying on their vital processes. After the course of a few years, all existing animals and vegetables entirely pass away; their solid constituents disintegrate and take on other conditions, and the water lost, perhaps, for a time in the ground, at last escapes in the form of vapor into the air. In that great and invisible receptacle, all traces of its ancient relations disappear—it mingles with other vapors that are raised from the sea by the sun. From the bodies of living animals and plants, immense quantities are hourly finding their way to the same reservoir. In a crowded city, from the skin, and by the breath of its numerous inhabitants, clouds of vapor are continually escaping—we see this visibly going on in the cold weather of winter; and, though invisible, the process is equally active in summer—the escape arising from the drink that we take, or from all those various portions of the system that are dying each moment —for the life of an individual being is made up of the successive death of all its constituent particles. In the same manner, from the forests and meadows, and wherever vegetables are found, water is continually evaporating, and that to an extent far surpassing what we might at first sight be led to suppose. In a single day, a sunflower, of moderate size, throws from its leaves and other parts, nearly twenty ounces weight. How enormous then must be the quantity which escapes from the surface of a great continent. Yet all this is thrown into the air, and there it mingles with other portions, some of which are coming from living races, and some from the decay of the dead, some derived from the surface of the ground, and some from the remote regions of the sea. It seems as if nature had taken sure means that here all traces of identity should be lost. The winds, proverbially inconstant, blow at one time from the coasts of Europe, at another from Africa, at another from Asia. In the republic of the universe there is a stern equality, the breath of the king intermingles with the breath of the beggar, and the same quiet atmosphere receives the exhalations of the American, the European, the Asiatic, the African; the particles that have risen from the dead intermingle with those from the living, and as if this were not enough, the winds and the tempests obliterate every distinction, and dash in one common confusion these relics of every part of the globe.

From the atmosphere—that grand receptacle, at proper periods, portions of the accumulating water are removed. Each evening in summer, as soon as the sun goes down, some fall as dew, covering the leaves of plants and other objects which have been parched by the warmth of the day. In sequestered places, in valleys, and on the sides of mountains, mists collect—these are nothing more than terrestrial clouds composed of innumerable little drops of water. They fall upon the ground, and trickling in streams, find their way to the rivers, and from thence to the sea. Other portions collect as clouds in the more elevated regions of the air, and there they take on fantastic shapes, changing their forms and their colors every moment. Some, when the sun is in certain positions, borrow a glory from his rays; some hide the lightning in their darkness; and some afford a curtain on which the rainbow is painted. Of these drops that descend together, who can tell the history; from what region did they come, or what was their last condition? In an invisible state they have been in that invisible world which envelops the earth on all sides, and nature has taken from them every mark which could indicate the scenes they have passed through.

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, DECEMBER 24, 1845.

Epidemic Smallpox.—Although little is said, the fact is notorious, that smallpox, and its varioloid phases, are very prevalent the present season in most of our large cities. The number of deaths announced in the bills of mortality at Philadelphia, Baltimore, and some other places, demonstrates the criminal negligence of the people to avail themselves of vaccination. But there is the strongest prejudice against it imaginable, in the minds of many of the ignorant, who conceive themselves exceedingly wise. Even in Boston, it is no uncommon thing to hear both men and women, who appear to be persons of ordinary intelligence, declare, with an air of contemptuous triumph, that they "*don't believe*" in the operation, and therefore positively refuse the blessing when proffered and urged upon them gratuitously. By such individuals, to some extent, the malady is kept in perpetual existence with us, although a never-ceasing effort is made to protect the great body of the inhabitants.

With regard to Boston, it should be distinctly understood, since the circumstance is one of general remark and of much importance, that the regular inhabitants of the city are not the sufferers by smallpox, to any extent worth noticing; but those who come here to seek temporary employment. They arrive in the full vigor of health, and many, whose hopes and prospects were most satisfactory, soon fall victims to this pestilence that walketh in darkness. Such as recover, which is a multitude in the aggregate, are ever after disfigured and scarred in a manner that shows the contest which they had with the terrific foe.

Varioloid, which is rarely fatal, is so exceedingly common as to excite no marked attention, except where the wholly unprotected are within the reach of its influence. In most cases, the patients are those who have vaccinated themselves. Many physicians conceive the susceptibility to be in consequence of the insertion of deteriorated virus. Of all the States in New England, Maine is by far the most melancholy sufferer from smallpox; and for the last twenty years, within the compass of our own recollection, the numbers from that State who have died of it, even in Boston and its vicinity, would make a formidable catalogue. The same State furnishes, it is presumed, two thirds of all the cases of smallpox and varioloid, occurring in Boston the present season. Young seamen from that State, also, die of it all over the world. There appears to be an utter disregard to vaccination in the inland towns of Maine, which explains the unprotected condition of the multitudes of their young men and women who flock to this metropolis. This sad neglect of both parents and the public authorities has been often repeated, in this Journal and elsewhere, but they heed it not—and the fated State of Maine, without some more interest in vaccination, is destined to supply food for this wasting pestilence, for another generation to come.

Phthisis and Typhoid Fever.—Through the politeness of Mr. Gliddon, the celebrated Egyptian antiquarian, we have received a letter from Dr. Boudin, chief physician of the Military Hospital of Marseilles, in which he propounds certain questions to the medical practitioners of the United States, in regard to phthisis and typhoid fever, which will soon be presented to them. He appears to be resolutely engaged in collecting certain statistical facts in regard to the localities where these diseases are most common in this country, with a view, no doubt, to comparing them with a similar class of observations made in France.

Lunatic Asylum of Tennessee.—A report was given in October last, by the medical superintendent, to the Legislature. This has really been a favorite institution of the State. Those who have been in Nashville know very well how much it differs from similar establishments in other places in the Union. Why does not some one have the moral courage to picture its condition? The statistics of the report are marked for publication.

Longevity influenced by Marriage.—The origin of the following article is unknown. It is nevertheless characterized by good sense; and the statistical facts which are incorporated with the remarks, are no doubt true. At all events, if any one feels at liberty to controvert any part of the extract, upon good authority, he shall have a hearing.

"The influence of marriage on health and human happiness, is an interesting and important inquiry. As the institution is based on the natural laws of the human constitution, there can be no doubt but that its relations, when properly entered into, are productive not only of happiness, but of a greater increase of health, as well as longevity of life. An European philosopher has recently made very extensive observations on this subject, and collected a great mass of facts which conclusively settle these points. His researches, together with what was previously known, give the following remarkable results. Among unmarried men, at the ages of from 30 to 45, the average number of deaths only are 18. (?) For 41 bachelors who attain the age of 40, there are 78 married men who do the same. As age advances, the difference becomes more striking. At 60 there are only 22 unmarried men alive, for 98 who have been married. At 70, there are 11 bachelors to 27 married men, and at 80 there are 9 married men for 3 single ones. Nearly the same rule holds good in relation to the female sex. Married women at the age of 30, taking one with another, may expect to live 36 years longer; while for the unmarried, the expectation is only about 30 years. Of those who attain the age of 45, there are 72 married women for 52 single ladies. These data are the result of actual facts, by observing the difference of longevity between the married and the unmarried."

Neill on the Nerves.—Without having devoted much attention to a new treatise on the nerves, by John Neill, M.D., of Philadelphia, author of a recent chart of the arteries, we have seen enough of the plates to be satisfied of their accuracy. In pursuing a series of dissections, these lithographs would be invaluable, enabling the student to identify the individual nerves in almost any part of the body, without additional assistance. Jordan & Co. have it for sale.

Medical Department of the U. S. Army.—From the Surgeon-General's last annual Report, it appears that—

"The number of officers and men remaining sick on the 30th of September, 1844, was 620; and the number of cases of disease which have occurred within the twelve succeeding months, is 22,496; making an aggregate of 23,116 cases of indisposition that have been under medical treatment since the last report. Of the whole number of sick reported, 22,091 have been restored to duty, 14 are on furlough, 168 have been discharged the service, 14 have deserted, and 78 have died; leaving, on the 30th of September, 751 still on the sick report.

"The mean strength of the army for the last 12 months being, according to the monthly returns in the Adjutant-General's office, 8590, and the number of cases of indisposition reported during the same period being 22,496, it will be perceived that the proportion of cases of disease to the number of officers and enlisted men in the service was 2.61 to 1, or that, on an average, each man was sick 2.61 times during the year; that the ratio of deaths to the number of men was as 1 to 110.12, or 0.90 per cent.; and the proportion of deaths to the number of cases under treatment, as 1 to 295.07, or 0.33 per cent.

"A medical board for the examination of applicants for appointment to the medical staff of the army was convened in the city of New York on the 1st of July last. Before this board 15 candidates were invited to present themselves, 10 of whom only appeared and were examined; and of these, but two were approved and recommended for appointment."

Massachusetts Medical Society's Publications.—In answer to a correspondent we are able to state that the following works have been distributed by the Massachusetts Medical Society to its members, viz.:—

Smith and Tweedie on Fever; Pearson's Surgery; Mackenzie on Diseases of the Eye; Copland's Dictionary, 3 vols.; Louis on Typhoid Fever, 2 vols.; Dissertations on Direct Exploration; Louis on Yellow Fever; Green on Diseases of the Skin; Collins's Midwifery; Brodie on Diseases of the Joints; Ashwell on Diseases of Females; Cooper on Dislocations and Fractures of the Joints.

Of the above there now remain in the library copies of Vol. 1, Smith and Tweedie on Fever, price 75 cents; Vol. 7, Dissertations on Direct Exploration, 75; Vol. 8, Copland's Dictionary (2d Part), 1,25; Vol. 11, Collins's Midwifery, 75; Vol. 12, Brodie on Diseases of Joints, 1,00; Vol. 13, Ashwell on Diseases of Females, 1,00; Vol. 14, Cooper on Dislocations and Fractures of the Joints, 1,50; Vol. 15, Copland's Dictionary (3d Part), 1,25.

It will be seen that there are none of the first volumes of Copland's Dictionary—but an edition has been published in New York, and, if the first volume is found to correspond with the Society's edition, a number of them will be procured and furnished to members at $1,25.

The superintendent of the Masonic Temple will deliver the books between 12 and 2, daily.

Rhinoplastic Operation.—Dr. March, of the Albany Medical College, whose surgical skill is constantly manifested in his cliniques before the medical class, has recently performed this operation on a man from Vermont, three fourths of whose nose had been destroyed. A sheet-lead pattern of the flap being placed on the forehead, an outline was made with ink, as a guide for dissecting it. A portion of one of the alæ of the original nose, which had not been wholly destroyed, was partially detached and elevated, to serve as a septum and column for the support of the new nose. The flap was then dissected down from the forehead to a point between the eyebrows, and twisted, but not detached. On one cheek, a groove was made for the reception of one ala; while the other was merely denuded of its skin adjoining the place from which the column was taken. The flap was then nicely adapted to the raw surfaces, and retained by sutures. The column was attached to the apex by sutures, and the nostrils plugged with oiled lint. The wound in the forehead was then dressed, with sutures, lint and compress. The uniting process has now, a week after the operation, been highly favorable.

Medical Miscellany.—A Dr. Hatch has been arrested at Philadelphia, accused of robbing an express.—Dr. Scott is Speaker of the House of Delegates in Virginia.—Dr. E. Parmly, Dr. J. D. Russ, and Dr. John H. Griscom, of New York, belong to a society which manifest great benevolence, in looking after the interest of persons arrested as criminals, and also in providing for those who have been discharged from prisons.—Dr. Elijah White, of Oregon, late U. S. Agent of Indian affairs of that far off territory, is the bearer of a recent memorial from the settlers there, to the Government at Washington.—Smallpox prevails so alarmingly in Henderson, Ky., that the courts cannot be held, owing to the fears of jurymen of contracting the malady.

TO CORRESPONDENTS.—A review of Dr. Dickson's Chrono-thermal System of Medicine, one of Dr. Bedford's Introductory Lecture, and Dr. Mansfield's Remarks on Vaccination, &c., have been received.

Number of deaths in Boston, for the week ending Dec. 20, 50.—Males 17, females 33. Stillborn, 3. Of consumption, 14—smallpox, 4—infantile, 4—scarlet fever, 1—diabetes, 1—inflammation of the lungs, 2—child-bed, 4—disease of the heart, 1—inflammation of the bowels, 2—intemperance, 1—dropsy of the brain, 1—teething, 1—disease of the liver, 1—hooping cough, 1—typhus fever, 3—syphilis, 1—asthma, 1—convulsions, 1—fever and ague, 1—worm fever, 1—rupture, 1—croup, 1—drowned, 1—unknown, 1.

Under 5 years, 15—between 5 and 20 years, 6—between 20 and 60 years, 25—over 60 years, 4.

The Philosophy of Medicine.—Dr. Paine's Introductory Lecture to the Medical Class of the University of New York has been published. It treats of the philosophy of life, of disease, and of medicine, and is written in the wonted vigorous style of the author. A page is here copied.

"Nothing short of an enlightened and comprehensive view of nature, in all her departments, can constitute an able practitioner of medicine. Where one department engrosses the attention, all others are brought hypothetically within that limited compass. It is like cultivating one property of the mind at the expense of the rest. The poet thinks differently from the man of enlightened judgment—the lawyer is prone to sophistry and scepticism—the mathematician is wrapt in abstract truths and deficient in practical business. The history of nature is nothing to the chemist out of his laboratory. In physiology he is like the astrologer amongst the stars.

"Shall I speak of the physician? It is said by Samuel Johnson that he is more apt to cultivate all the powers of his understanding, and all departments of nature together, and that he has, therefore, been more distinguished for an enlightened and comprehensive view of the various subjects for reason, than any other class of mankind.

"Although nature, to the eye of the philosopher, appears in an aspect of astonishing simplicity when he contrasts her forces and laws with the diversity of the phenomena, he does not confound the fundamental principles which distinguish the different departments of nature. The phenomena, also, to every other eye, appear confused, and such as are peculiar to organic beings are mixed up with those of the inorganic. But he who has obtained, by a wide observation of nature, the key to the philosophy of life, lays open at once the apparent secrets of all its results, whether in health or disease. Whatever he sees has its individuality, and stands in relief from all the rest. He knows at a glance from whence this or that springs, how it is related to others, and how to trace the whole directly up to a few simple principles. To all but such an eye, however, the phenomena of life, and more especially of life diseased, appear as does a field to all but a botanist. The common observer sees nothing but a confused assemblage of grasses, and probably will tell you there is but one species, where the botanist will as instantly discover fifty. Each species has, to the latter, a distinct individuality, and he cannot regard them in that state of confusion which is seen by the uninitiated. He has studied each plant, knows its specific characters, its relations to others, its habits, &c. By these modes of observation he has also acquired the knowledge that nature has pursued a common plan of organization, and linked the whole by close analogies throughout the vegetable kingdom. Were the botanist, therefore, to range simultaneously amongst the 100,000 species of plants, he would see nothing but individuality, and the greatest simplicity in the principles upon which the whole are constituted. And just so it is with a philosophical observation of the healthy and morbid phenomena of the animal kingdom."

New Medical Works in London.—On Diseases of the Liver. By G. Budd, M.D., F.R.S.—The Power of the Soul over the Body; considered in relation to Health and Morals. By George Moore, M.D.